

(12)

(21) **2 495 340**

(22) **30.07.2003**

(51) Int. Cl. 7: **C07C 51/09, C07C 53/02,
C07C 53/06**

(85) **14.02.2005**

(86) **PCT/EP03/008399**

(87) **WO04/020382**

(30) **102 37 379.5 DE 12.08.2002**

(71) **BASF AKTIENGESELLSCHAFT,
67056, LUDWIGSHAFEN, XX (DE).**

(72) **KARL, JOERN (DE).**

**PASTRE, JOERG (DE).
HAUK, ALEXANDER (DE).
ADAMI, CHRISTOPH (DE).
BOEHLING, RALF (DE).
LENZ, ROBERT (DE).**

(74) **ROBIC**

(54) **PROCEDE ET DISPOSITIF DE PRODUCTION DE FORMIATES D'ACIDE FORMIQUE ET UTILISATION
DESDITS FORMIATES**

(54) **METHOD AND DEVICE FOR PRODUCING FORMIC ACID FORMATES AND USE OF SAID FORMATES**

(57)

The invention relates to a method for producing formic acid formates, whereby (a) formic acid methyl ester is partially hydrolysed with water; (b) formic acid methyl ester and methanol are separated by distillation from the reaction mixture obtained in step (a), forming a current containing formic acid and water; (c) the current obtained in step (b), containing the formic acid methyl ester and optionally methanol, is converted into a current containing formate and water, by (i) reaction with a basic compound having a pKa value of the corresponding acid of the corresponding dissociation step of = 3, measured at 25 °C in an aqueous solution, in the presence of water, and (ii) separation by distillation of the methanol; and (d) the current obtained in step (b), containing formic acid and water, and the current obtained in step (c), containing formate and water, are combined to form a mixture containing the formic acid formate and water. The invention also relates to a device for producing said formic acid formates and to the use of the same.



(86) Date de dépôt PCT/PCT Filing Date: 2003/07/30
(87) Date publication PCT/PCT Publication Date: 2004/03/11
(85) Entrée phase nationale/National Entry: 2005/02/14
(86) N° demande PCT/PCT Application No.: EP 2003/008399
(87) N° publication PCT/PCT Publication No.: 2004/020382
(30) Priorité/Priority: 2002/08/12 (102 37 379.5) DE

(51) Cl.Int.⁷/Int.Cl.⁷ C07C 51/09, C07C 53/06, C07C 53/02

(71) Demandeur/Applicant:
BASF AKTIENGESELLSCHAFT, DE

(72) Inventeurs/Inventors:
ADAMI, CHRISTOPH, DE;
KARL, JOERN, DE;
HAUK, ALEXANDER, DE;
BOEHLING, RALF, DE;
PASTRE, JOERG, DE;
LENZ, ROBERT, DE

(74) Agent: ROBIC

(54) Titre : PROCEDE ET DISPOSITIF DE PRODUCTION DE FORMIATES D'ACIDE FORMIQUE ET UTILISATION
DESDITS FORMIATES

(54) Title: METHOD AND DEVICE FOR PRODUCING FORMIC ACID FORMATES AND USE OF SAID FORMATES

(57) Abrégé/Abstract:

The invention relates to a method for producing formic acid formates, whereby (a) formic acid methyl ester is partially hydrolysed with water; (b) formic acid methyl ester and methanol are separated by distillation from the reaction mixture obtained in step (a), forming a current containing formic acid and water; (c) the current obtained in step (b), containing the formic acid methyl ester and optionally methanol, is converted into a current containing formate and water, by (i) reaction with a basic compound having a pK_a value of the corresponding acid of the corresponding dissociation step of $= 3$, measured at 25 °C in an aqueous solution, in the presence of water, and (ii) separation by distillation of the methanol; and (d) the current obtained in step (b), containing formic acid and water, and the current obtained in step (c), containing formate and water, are combined to form a mixture containing the formic acid formate and water. The invention also relates to a device for producing said formic acid formates and to the use of the same.

